

Remarks

The specification has been amended to cross-reference related applications.

Claims 1-30 are in the case.

Claim 1 has been amended to delete the term "pulse" as this term is inconsistent with Hz of 0 and 100% duty cycle (disclosed in the international application at page 5, lines 17 and 18).

Claim 1 has been amended to recite agitation of electrolyte and agitation rates, to further distinguish prior art. Agitation and agitation rates are also recited in Claim 9. The recitation in Claim 1 is in terms of liters/min/cm² as is the case in the international application as filed at page 5, lines 20 and 21. The lower limit 0.01 is not specifically recited in the specification but meets the description requirement because of In re Wertheim, 191 U.S.P.Q. 90 (CCPA) 1976) and McLaughlin v Roberts 197 U.S.P.Q. 831 (Pat. Off. Bd of Pat. Int. 1978) which hold that limitations encompassed within ranges that are recited do not need literal support to meet the 35 U.S.C. 112 description requirement.

The temperature limitation has been deleted from Claim 1 as it is not a critical parameter from a patentability standpoint.

Claims 27-30 are new claims.

Basis for new claims 27 and 28 is found in Claims 1 as filed.

Claims 29 and 30 are within the scope of Claim 4 as filed. NiP is found in Example 1 (page 13); Co/P is found in Example 3 (page 17) and Fe/Ni appears to be found in Example 4 (pages 18 & 19) and Example 7 (page 25).

The claims have been amended to delete multiple dependencies and "preferable" phrases.

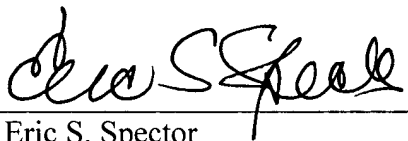
The closest prior art is considered to be Erb et al U.S. Patent No. 5,352,266 and Erb et al U.S. Patent No. 5,433,797. The claims distinguish these two patents on the basis of minimum

deposition rates and agitation rate. The two patents do not enable deposition rate significant enough to produce material at commercially viable rates but teach only thin coating applications which could be considered as a "lab curiosity". Moreover, the two patents do not teach agitation rates because in "beaker tests" as used in the patents only small samples were synthesized and there is no ion depletion problem. On scaling up, it is discovered herein that continued presence of ions at cathode surface becomes important and critical; it has been discovered herein that agitation and agitation rates are an important control parameter for this purpose.

The claims are submitted to distinguish Taylor et al U.S. Patent No. 6,080,504 on the basis they are directed at establishing grain size and the disclosure of 6,080,5604 is not but rather is directed to depositing minute amounts of metal as small particles (column 3, lines 30), on the basis that 6,080,504 enables only deposition rates below the limit of Claim 1 herein and on the basis that 6,080,504 does not teach are ion depletion problems requiring agitation.

Respectfully submitted,

BACON & THOMAS, PLLC.

By: 
Eric S. Spector
Reg. No. 22,495

BACON & THOMAS, PLLC.
625 Slaters Lane, Fourth Floor
Alexandria, Virginia 22314-1176
703 683 0500

Case No. 6208
B&T Docket No. BROO3001

Date: December 9, 2004